Connecticut River Atlantic Salmon Commission
Technical Committee Meeting – Minutes
September 23, 2011

1. **Call to order and approval of Minutes from the meeting on August 3, 2011 (Slater)**

Chair Dr. Slater called the meeting to order at 10:14 AM and adjourned at 1:19 PM.

Mr. Gephard moved to accept the meeting minutes of August 3, 2011 meeting, it was approved by the Committee.

2. **Status report on White River National Fish Hatchery and Service position (USFWS staff)**

Mr. Archambault requested that Dr. Ardren present a series of digital images taken of the facility and surrounding area on a projection screen for the group. Dr. Ardren had approximately two dozen images that were in most cases described in come context by hatchery manager Mr. Gillette as well as Mr. Archambault. The slides illustrated the extent of the damage to the facility in many areas. Mr. Gillette noted that the National Wildlife Refuge System staff has been on site operating heavy equipment for many days and have removed an estimated 9,000 tons of sediment. Sediment deposits at the hatchery range from 0.5 – 3.0 feet in areas that were inundated and in some cases were even deeper, hatchery fish from the outside pools were found mixed in with this material and were shown on the images.

Dr. Slater asked how many of the pools were flooded. Mr. Gillette stated about 40 pools but noted that due to the flooding of the wells, backup flows occurred in all pumped water to the pools, which contained high sediment loads and river water. Mr. Gephard asked why were not all the pools flooded? Mr. Gillette responded that there is a gradient on the grounds where the pools are located, and that the flood water did not directly get into the main building. Dr. Slater asked if all tanks received backflow from the pumps during the flood. Mr. Gillette stated yes, the well pumps feed lines were pumping mud into all the hatchery's tanks (systems) and he noted in the worst area of the hatchery grounds the mud was 12 feet deep, and structure damage has been so severe in some areas and adjacent buildings that they have been determined unsafe and staff is not allowed to enter. Mr. Gillette commented there is much left to be done.

Mr. Archambault stated that the Service's engineers, following the initial preliminary assessment, have been able to better refine and evaluate facility impacts and estimate a re-build cost of up to $14 million, with it likely being in the $10-14 million range. He stated the Service has put in for Federal Emergency (FEMA) assistance, though the outcome of that request is uncertain at this time. The Service will continue to assess the facility but has determined a complete re-build is necessary. He stated the Service position on this topic is clear and noted given the projected FY12 budget and reductions in funding it is a real concern so all funding options need to be explored such as FEMA.

Dr. Slater asked Mr. Archambault to elaborate on the Service decision to rebuild. Mr. Archambault stated that there is no way to keep the facility open given several important points, the first is safety concerns for staff which include electrical issues at the facility, second is the Service decision to have WRNFH a class A facility which will require a complete decontamination. At this point he noted that a nearly identical flooding situation occurred at Alleghany NFH several years ago and the Service did the same complete decontamination/rebuild with facility.

Mr. Gephard asked for more details on the wells, what do you mean by rebuild on that topic? Mr. Archambault noted that he did not have a fine detail repair/replacement list with him, but all the pumps were seriously impacted/compromised. Mr. Tilton commented that the well pumps were all pumping mud and they all experienced electrical damage. Mr. Gephard asked if the actual well was believed to be compromised or if they can be maintained/disinfected. Mr. Tilton responded yes (wells may still be used – best information at this time).

Mr. Archambault stated that this decision was not made lightly. It was a decision that came after more information on impacts were available and included input from Service Engineers and discussions with the Regional Director and the Regional Office Fisheries staff. Mr. Archambault stated the final decision was clear. Mr. Gephard asked more about details of the rebuild relative to disinfection and construction – mostly outside of main building, correct? Mr. Archambault stated there are many things that need to be done, construction, electrical, infrastructure work. Mr. Gaphard asked about the timing of this work. Mr. Archambault replied Service will put in a request to DOI, the FY12 budget appears to be a decrease of 15-20% with little to no money targeted for construction, FY13 is believed to be even worse in terms of reductions given budget discussion. He stated he does not know when the facility may reopen, too many unknowns at this time. He stated the Service will do what it can in terms of existing resources but the partners may be able to help, may be able to reach out to congress. The Service cannot do this. Mr. Gephard asked that given catastrophic events happen nationally, does the DOI/FED have any emergency funds for this sort of thing. Mr. Archambault replied that the DOI does not have any such pool of money – it requires Acts of Congress. He stated we will proceed with what we are able to obtain for funding which may be any portion of the stated target amount – its unknown what we will have which will effect rate of progress. We will proceed using existing Fisheries funds to accomplish what can be done with those in the interim. At this time we will likely be operating under a Continuing Resolution at the start of FY12 (Oct 1). Mr. Archambault restated that there is no single driver on this decision, multiple considerations, safety of staff, health of staff, engineering assessments.

Mr. Gephard asked where did the Service get Allegheny NFH rebuild money? Mr. Archambault replied from multiple sources including redirected funds, money from congress, Department money. We can the same approach for WRNFH but the first best option is FEMA. Mr. Gephard asked so what happens after January first when there are no fish on station? Mr. Archambault stated the staff will be fully occupied with tasks of the decont and rebuild well into the future, no concerns from Regional Office on the staff being productive. The concern comes for construction money, will use in-house sources, staff resources to extent possible such as NWR. Mr. Archambault stated the sooner the fish are off the station the earlier work can begin. He stated this is a flagship facility for Region 5 and Service is committed to re-opening, but need time to rebuild.

Mr. Gephard questioned what the Service means regarding WRNFH being a multi-use facility in the future, there is a concern regarding Atlantic salmon restoration with this. Mr. Archambault stated he cannot speak to details of what will happen in the future at this time. He stated the USFWS is not walking away from the CT River Atlantic salmon program. The Service is a committed partner and provides support for this program at Dwight D. Eisenhower NFH, Cronin NSS, North Attleboro NFH and Berkshire NFH. Mr. Archambault stated we will engage partners as the rebuild comes closer to happening, we can't lobby congress, we will look at all options for the facility and like all of the others noted, expect Cronin, it will serve a number of roles.

Dr. Slater asked so is it definite that the WRNFH will close? Mr. Archambault replied the decision has been made – yes – we will depopulate it and we will work the partners and best uses of the fish on

station. Mr. Gephard stated he understand the purpose of the depopulation but cannot understand why the Service will not allow the fish to be spawned before being moved off site – why is the Service so adamant on this. Mr. Archambault replied the pictures you just saw are the reason for the decision it illustrates the issues and the Service believes it is unreasonable for employees given existing work. Mr. McMenemy stated that it seems like a lot of clean-up has occurred and things may be operating to some degree. Mr. Archambault replied that the facility is not close to back to normal and we are focused on the rebuild. There will be no spawning and the partners can take the fish if they chose too. Mr. Gephard – I understand the you, on the point of no eggs on station, but why not using multi-agency support as occurs every year, use jugs and spawn fish, take them elsewhere for incubation. Even if we get 1 million eggs it will be worthwhile to the program. Mr. Archambault – this is not an option, we can help to get the fish off station. Dr. Slater asked the call in agency staff (~8 people) if they were hearing all of this discussion they replied yes. He then stated given these Service positions we need to move on to discussing options. Mr. McMenemy stated he was not convinced of the reasoning. Dr. Slater replied he did not believe we have an option. Mr. McMenemy then asked Mr. Archambault if he could provide a list of the damages. Mr. Archambault replied yes.

Mr. Carpenter (call in from NHFG) asked about the issue of didymo and concerns of spreading this, any details on disinfection or detection available? Mr. Archambault stated no way to ensure it is not present throughout the hatchery given the compromised wells. Mr. Gephard stated that CTDEEP has didymo in Farmington River and also removes trout in fall from the river for spawning. They have a concern for water contamination (which is the issue) and have a researcher at Connecticut College who has developed a salt treatment that is therapeutic for transferring trout but not good for didymo – unsure of exact details but some cellular level impact for didymo. He said he may be able to provide more information this soon. He stated as this was a huge flood the didymo response is unclear given its association with substrate. He stated CTDEEP believes precautions should be taken but they may be willing to take risks if they are determined to be low versus benefits of actions – more information is required. Dr. Slater stated that like CT, his agency suspects the didymo issue may be a low risk, he will check with his fish health people on this.

Mr. Coll (call in from USFWS Lamar FHC) stated that furunculosis was not detected from river fish collected in pools (deposited by flood), virus check appear good so far, he will conduct tests on Atlantic salmon prior to movement off station. Dr. Slater stated that those fish tests on salmon must be started immediately. Mr. Coll stated that it takes 28 days (include SR males and ovarian) for test results for salmon pathogens of concern, although they have a good idea after 14 days, they are replicated once more. The issue of Roxbury State Fish Hatchery was raised. Mr. Coll stated that it has had furunculosis in past and was a concern. Mr. McMenemy noted that Roxbury is on a Branch (Third) that is downriver of WRNFH. Mr. Coll stated that the Vermont Fish Health Lab has been destroyed by the flood and that his lab is providing significant support to VTDFW.

Dr. Slater stated let's move on to tackle issues at hand from Ken's email, first issue what about spawning of sea-runs. He asked Mickey for an update on sea-run status.

Mr. Novak – as of yesterday, when he checked fish status, there were only two females ready to spawn, the rest are a week or more away. There are several males that are ready. He stated that he could get PIT tag information on these females and males and spawn them on 9/26 with input from Dr. Bartron on best genetic mating scheme. He thought it would not be difficult (relative to fish maturity) to delay the current spawning schedule by one week. Mr. Gephard asked if it was advisable to spawn those two females soon. Mr. Novak replied yes, they should be spawned and he can easily do so. Mr. Gephard

stated we should have Mickey spawn those fish with Meredith's information on Monday. Dr. Bartron stated she has the PIT tag info, lets plan on spawning them, she can speak with Mickey over the phone. Mr. Novak stated he will call and spawn the fish on Monday 9/26. Dr. Bartron said OK, we will arrange a conference call and adjust the other dates.

Mr. Gephard stated OK, we take the sea-run eggs then what? No chiller at Cronin. Mr. McMenemy asked if there was a chiller that could be moved from somewhere else. Mr. Gillette replied they did not have any chiller that could be moved from WRNFH. Mr. Gephard – so the eggs will hatch in December, fry can't be stocked, what can we do for options? Mr. Archambault stated that we could see about feeding fry at Cronin. Mr. Sprankle stated that his understanding was this was not an option (Cronin) and it was stated as such in his Service notes on this for the meeting. Mr. Archambault stated that there are other options and that may include DDENFH. Mr. McMenemy stated that we will have fish health testing results on adults after spawning and may consider moving eggs before eye-up [this must be determined state by state – VTDFW has required additional testing on SR eyed eggs - a small batch had been accelerated to eye-up at Cronin – on ambient well water in past to speed test batch]. Dr. Slater stated they could take fish health cleared eggs and feed/rear SR fry possibly. MADFW may not need the additional later development fry stage testing VTDFW has required – he asked Dr. Simmons (MADFW Hatchery Chief).

Mr. Gephard asked about the extent of incubation space at Cronin. Mr. Novak stated that he has space for up to two million eggs. Mr. Gephard stated the Kensington State Fish Hatchery produces more eggs than they can hold, fry may not be reared there but they could potentially incubate SR eggs. The fry could then be farmed out. Whittemore Station may be an option for eggs and rearing fry – it may be able to receive broodfish from WRNFH, they could be spawned there and or held (younger age classes from WRNFH). Mr. Marchant stated that given the use of well water at Cronin, and expected spawning dates, the eggs would have to be moved likely before Thanksgiving with feeding starting in mid December.

Mr. Carpenter, asked if we assume WRNFH is down for years what does that mean to this program?

Dr. Slater replied we cannot tackle that question right now. We will plan on spawning the two female on Monday and delay the rest by a week. Cronin will incubate and feeding of fry will take place at other state and federal facilities.

Mr. McMenemy stated we have not accounted for the expected SR and Kelt after taking out allocations for eggs for future smolts (DDENFH), future brood (RRSFH and KSFH) and target fry stock out number for Sawmill River and Bronson Brook. It appears there will be about 150,000 fry that will be left and should be feed/reared based on the table in the handout – what about DDENFH?

Mr. Bouchard said he would need to examine his capacity on this question.

Mr. Novak stated that if no hormones were used he could delay spawning longer. Dr. Slater countered that the issue would be impacts to desired mating from genetic information and synching of egg take with staffing issues. He asked from a manager standpoint is it better to have the egg takes on many dates or occur on fewer group dates. Mr. Bouchard replied from the standpoint that we are talking about having to feed these fry – it would be best to have them "lumped" not trickling in due to many different dates. Mr. Coll replied another reason to lump/batch spawn is from a fish health testing

standpoint – it's advantageous. Dr. Bartron noted her concern from having a reduced number of fish to select from using the genetics matrix. Mr. Gephard stated stretching out spawning is not justified.

Mr. Gephard stated lets discuss dates. Potential dates at this would be implant on October 6th, with the first large egg take on Oct 12, followed by second egg take on Oct 17. Need to refine.

Dr. Bartron asked Mr. Novak about the impacts of delaying fish and their egg status. Mr. Novak replied one week delay will be OK. Mr. Gephard asked Mr. Marchant if he had any issues with the proposed dates to which he replied no. Mr. Marchant stated that we should keep checking the fish as we would not want to delay any that are ready to spawn, if there are some ready they should be spawned.

Dr. Bartron stated we will plan on having a call on spawning on 9/27 to define dates and the plan.

Mr. Archambault asked if CTDEEP can take SR/Kelt eggs at KSFH to which Mr. Gephard replied no, no space – but space may become available if there are movements of eggs for other management opportunities.

Dr. Bartron asked if the state's future broodfish needs for CT and MA, which would be ~ 4,000 eggs, would go to RRSFH first.

Mr. Marchant replied that KSFH has taken these eggs, reared future brood and later transferred them to RRSFH. His facility does not have any segregation ability and he cannot take SR eggs on station to incubate. [see later comments that would permit eggs pending health screening]

Mr. McMenemy stated that Roxbury SFH has the ability to incubate 350,000 eggs but cannot take SR egg. He noted here gain we need to account for an additional 150,000 SR/Kelt fry that will need to be feed above noted allocations.

Mr. Bouchard stated with Mr. Archambault that DDENFH can feed and rear the number of SR/Kelt fry needed to produce the target stock out number of 92,000 for Bronson Brook and Sawmill River. The additional 150,000 fry that are being discussed is not something he is clear on relative to his ability. He would prefer to get the eggs delivered as soon as they can be shipped. Mr. McMenemy noted this will require approval with Tom Wiggins (*if advance fry fish health testing also required as was the case at WRNFH shipped eggs*), he will check on this option for the target allocation for Sawmill and Bronson at DDENFH.

Mr. McMenemy suggested KSFH feeds the additional 150,000 SR/Kelt fry, send the SR eggs to KSFH and have KSFH later on send their domestic eggs somewhere else. The furunc issue for KSFH can be dealt with by disinfection. Perhaps Roxbury SFH can receive these domestic eggs from KSFH. Mr. McMenemy will check on this option.

Mr. Gephard – you suggest KSFH take Cronin eggs (the unaccounted for eggs producing ~150,000 fry) with the offset balance of KSFH domestic eggs going to Roxbury, he will check on this option as well..

Dr. Slater stated that RRSFH can take the state of CT and MA future broodfish egg allocation (4,000 SR/kelt eggs – includes KSFH allotment) if ovarian test and males are clean – before they are eyed.

Mr. McMenemy questions the group are we not concerned with additional future broodstock fry beyond the 4,000 egg target for MA and CT hatcheries? What about the future and WRNFH.

Mr. Archambault replies that this group should assume that WRNFH will not be ready in the next year or two to receive fish.

Dr. Slater asked openly if there are any other options? RRSFH is at capacity so no option there. He asks USFWS if it may possible to consider North Attleboro for incubation space or to take broodfish from WRNFH.

Mr. Archambault stated that WRNFH broodstock will not be going to NANFH, two person station with multiple projects going on already. Mr. Lofton added that he has a total of 37 CT river kelts on station. Dr. Slater replied he understood the situation.

Dr. Slater then noted Merrimack River salmon broodstock will be reduced and whether there would be any potential for NANFH to rear future broodstock fry at that station (fry hatched early this fall). Mr. Archambault replied no fry will be going to NANFH at this time. Dr. Slater replied OK, and asked about Berkshire NFH as an option. Mr. Archambault replied that Berkshire is a one person station that functions with volunteers. It has lake trout on station for great lakes production given Allegheny NFH issues, and some production for CT R smolts (5-7,000 smolts typically produced).

Mr. Gephard commented that the smolts produced at Berkshire are of questionable value to the program at this time and suggested the program would be better served by exploring other options such as rearing future brood/fry this fall.

Mr. Archambault replied that this option could be explored. He wanted to hear more from Dr. Bartron on the value/design of rearing future brood fry at the station. Mr. Gephard asked if it might be possible to have the lake trout on station moved back over to Allegheny NFH. Mr. Archambault replied that that was not an option in the short-term.

Mr. Gephard then presented one potential ideal for an option with CTDEEP using Whittemore station which has been closed. Whittemore station has several options for holding existing WRNFH broodstock age classes to varying capacity depending on the age classes of interest/value. He noted the numbers for age classes can be mixed and matched for objectives. Mr. Gephard that one option may be to go to WRNFH, truck the age 3+ fish down, spawn them but there is no incubation space there currently, would require rigging egg stacks or the like, to incubate, or ship eggs somewhere. In addition, if fish are to be held on site and station to be started up it was estimated to be at a cost of $63,000. It was not being presented as a long term option but one to hold the program over to some degree until WRNFH comes back on –line in a time frame no more than two years out. Mr. Gephard wanted to know if USFWS would have anyway to fund the cost of this in whole or part?

Mr. Archambault replied we are talking about the $14 million cost of the WRNFH rebuild so in word answer is no. No money will be diverted from WRNFH for other activities/programs. Whatever "savings" there are in operation costs (electrical was noted) the money will be going back in to the facility to address issues. Mr. Archambault stated he saw no scenario for FWS to divert money. He did say that special funds could be directed as another option.

Mr. Gephard asked about timing relative to potential funding options. Mr. Archambault – if the CR is resolved quickly, then action on funding could occur as early as November.

Dr. Ardren noted that the plan being discussed would be for either/and or future brood and domestic fry production concerns. Mr. Gephard stated that all F1 parents at these state and federal facilities are important relative to genetic representation. Dr. Bartron noted they are all from the same source wherever they are, F1 are useful for mating and also production of fry. Dr. Ardren stated appears there is not a genetic benefit in the short-term. Dr. Bartron – reduce fry stocking will reduce adult returns which may present a genetic issue, some concerns may exist.

Mr. Gephard commented that at some point WRNFH will need to be repopulated, but if WRNFH rebuild will take many years, this is not likely a workable interim measure (Whittemore proposal). He stated if we are to be getting back fish in the 10s, we cannot sustain the program. Dr. Slater added, we need to stock millions of fry annually. Mr. McMenemy raised the question if the fish after having been at Whittemore would be permitted back to WRNFH in the future – putting the question to John Coll. Mr. Coll replied there would be potential issues with this approach. Mr. Gephard commented if testing continued in the future (Whittemore) then that may address concerns. Mr. Coll noted that if the fish from Whittemore were brought back on to WRNFH the Fish Health Policy would downgrade the status of a "new" WRNFH from Class A to Class C for two years. Mr. Archambault stated that is not acceptable and FWS wants WRNFH to be a Class A facility when back on line. Dr. Slater noted it will take two clean years of testing to go back up from a C to A.

Mr. Gephard commented that the effort could focus on the youngest broodline at WRNFH currently and put those in Whittemore. Mr. McMenemy stated you could add the 0+ fish from this falls spawn potentially too. Mr. Coll stated that if they were kept two years , grow, test, remain clean, then they may hopefully return to WRNFH. Mr. McMenemy stated another future option would be to keep future barren and spent fish that had been surplus to the program in the past at the State facilities and bring them to WRNFH.

Dr. Slater – we need to come up with money for the Whittemore option but also ask which is the best option, raise future broodline for WRNFH or produce eggs for production stocking.

Mr. Gillette – normally we have 900 age-4+ and 1,800 age-3+ for spawning at WRNFH.

Dr. Meredith Bartron commented that there needs to be more discussion on what is needed for future brood lines.

Mr. Gephard stated we have two options to consider (Whittemore) 1) genetic banking for WRNFH future brood or 2) spawning 300-600 females for production of fry.

Mr. McMenemy openly asked if there were any chiller options anywhere?

Mr. Archambault replied that we (Service) have existing issues at facilities.

Mr. Gephard – we could possible utilize Hogback Dam incubator (Farmington R) but that would only be an option for next year.

Mr. Gillette – noted that the WRNFH brood will need to be spawned first week of November. Mr. Gephard asked about the stresses they have endured and effects. Mr. Gillette believed the fish will spawn in typical timing. Dr. Ardren stated we should check with Dr. Steve McCormick on this item.

Mr. Carpenter asked if there was a target threshold for fry stocking in 2012. Dr. Slater noted his State facility will have 1 million fry. Mr. Gephard stated his State hatchery will have 900,000 fry. Mr. McMenemy stated this situation will be devastating to the upper basin. Dr. Bartron noted that the FWS has developed return model based on different stocking scenarios and strategies. She noted that Dr. Sweka's model has shown that 2 million stocked fry and 85,000 stocked smolts will yield a median adult return of 51 salmon.

Mr. McMenemy noted a concern for the 2012 smolt run based upon the parr index site data gathered to date. Mr. Gabe Gries noted in New Hampshire his index stations have shown low densities without flooding. Mr. Carpenter noted that high spring flows created unfavorable conditions for fry stocking. Mr. Len Gerardi also shared this concern for northern VT.

Dr. Ardren asked whether the genetic family marking study will have data to help direct stocking. Dr. Bartron replied she will have preliminary data from year 1 that may be useful. However, a similar study in the Merrimack River showed scattered contributions from across the basin. Mr. McMenemy stated this will be good information but its design lumps many tribs due to 10 region design. He stated that based on adult radio tag releases from Holyoke, contributions by tribs vary from year to year based on adult movements.

Dr. Slater asked about other options for WRNFH broodstock disposition. He noted if RRSFH and KSFH are not viable options, then what about RCNSS raceways, maybe to hold and strip of eggs. Mr. Archambault stated this would not be an option given raceway issues at RCNSS related to fish health. Mr. Carpenter stated that NHFG would be willing to consider stocking broodfish in their waters, but recognized concerns with Didymo. Dr. Slater stated that the 4 inch parr could go into MA waters, large parr habitat (Millers River). He did not believe the stocking of the adults would serve any productive purpose if intended for spawning and would likely create issues in the spring at fishways with operations and trapping. Mr. McMenemy stated he had the same concerns. Mr. Gephard he did as well and also had a concern for shad netters as these fish will show up in that fishery. Mr. Carpenter stated the upper CT River has didymo understands lack of support for that option – but what else? A few members noted that would only leave sacrificing the fish. Mr. Carpenter asked if Mr. Gephard could report back in more detail on the use of salt to treat for didymo and not impact fish. Dr. Slater that MA would be willing to take the larger broodfish for their lakes and ponds fisheries and noted the recent RIDFW request for juvenile salmon to CRASC – he ended that it appears limited what we can with these fish.

Dr. Bartron noted that in Maine prespawn releases have produced fry, and recognized that those were from captive (wild caught parr) broodstock reared to maturity. Mr. Gephard again restated his issues with releasing these fish. He stated they could consider a few fish for the Farmington River but he did think it worthwhile. Dr. Slater noted these are fish that have spent their entire lives in the hatchery, to release them as they had done in the past does not provide a payback, more issues than benefit. CTDEEP had similar poor experience in performance with releases in Farmington years ago, noting not in the best habitat.

Dr. Slater stated let's take this back to the states, we would rather not kill these fish. Mr. McMenemy stated lest stock them in the ponds for fishery. Dr. Slater stated the anglers will enjoy them in MA. Mr.

Gephard stated let's look for a home for these fish, Whittemore, in river releases, pond fishery. All agreed that testing for fish health on this broodfish must be started immediately to allow for options. Mr. Coll replied over phone, he would start fish health tests immediately.

Mr. Archambault stated he has appreciated folks offers to help at WRNFH, noted CTDEEP offers to come clean, as well as past help in spawning activities etc, that the states have always provided. Mr. Gephard noted that he could come up to WRNFH with a crew and help the staff. They had planned on spawning anyway.

Dr. Slater noted that we must keep up our sea-run numbers and if we are without WRNFH how can we maintain smolt production? It was agreed that as a group we must consider this.

Discussion moved to the CRASC Broodstock Plan. Dr. Slater stated unless there are any substantial comments we need to approve this document for the CRASC. Mr. Gephard asked that any additional comments be received by him on Monday. Dr. Slater wanted to plan on having this ready for the Commissioners at next Thursday's meeting.

Mr. Carpenter asked what range of fry production we would be looking at. The group reviewed that without Whittemore, it would be approximately 2 Million fry from CT and MA hatcheries, Roxbury VT hatchery could take 350,000 eggs, and DDENFH could take ~150,000 eggs for future smolt.

Meeting adjourned by Dr. Slater at 1:19 p.m.